**EPA Adds Chemical 1-BP to Clean Air Act’s Hazardous Air Pollutants List**

EPA has added 1-bromopropane (1-BP), aka n-propyl bromide, to its list of hazardous air pollutants under the Clean Air Act. This is the first time since 1990 that EPA has added a chemical to the list from a petition request.

The CAS number for 1-BP is 106-94-5.

**How is 1-BP Used?**

1-BP is found in products for the following applications:

* Adhesive sprays
* Solvent sprays for asphalt production, aircraft maintenance, and synthetic fiber manufacturing
* Vapor and immersion degreasers for cleaning plastics, metals, electronic components and optical components
* Dry cleaning
* Spot removers
* Coin cleaners
* Paintable mold release products
* Automotive refrigerant flushes
* Lubricants

**Which EPA Compliance Obligations Will This Affect?**

Since the change is part of the Clean Air Act, you will need to take note that this will affect the following EPA reports and permits:

* [SARA 313, Form R Toxic Release Inventory](https://isienvironmental.com/index.php/tri-form-r-blog/)
* Air Emissions Permits
* [EPCRA Tier II Report](https://isienvironmental.com/index.php/epcra-tier-ii-blog/)

You should also now start tracking the quantities purchased and used to help you with these reports.

**What is the Hazard?**

1-BP can be inhaled as a vapor or mists of spray and can also be absorbed through skin contact. It is colorless with a sweet odor. It can cause irritation of the eyes, nose and throat, and can damage the nervous system. Women of childbearing age are cautioned that prolonged exposure can cause developmental and reproductive effects. Extreme cases can cause kidney and liver issues as well as neurological issues such as dizziness, loss of consciousness, slurred speech, confusion, twitching and difficulty walking.

Some people have experienced symptoms with use as little as 2 days, but most cases have effects after long-term exposure.

**Make Sure You Know Your Exposures**

If your company is using products with 1-BP, please make sure you are conducting industrial hygiene sampling of your employees and their usage of 1-BP to identify what their exposures are. The American Conference of Governmental Industrial Hygienist’s (ACGIH) threshold limit value for 1-BP is a very low 0.1 ppm, so any exposures over that will require respiratory protection.

iSi has conducted 1-BP sampling for two of our clients within the past year. Each were using vapor degreasers with 1-BP in them. Exposures measured at 3.74 ppm for one company and 49.5 ppm for another. These were very well above the recommended 0.1 ppm and each company needed to change protocols to get the exposures down.

**PPE and Administrative Controls**

Besides respiratory protection when limits are over the thresholds, both EPA and OSHA recommend usage of chemical protective gloves/clothing and eye protection when handling 1-BP.

OSHA has specific recommendations for eliminating the hazard altogether through isolation, ventilation and other engineering controls. Some administrative controls they recommend include reducing both the time and number of workers exposed to the chemical, purchasing and storing the least amount possible and keeping containers closed between use.

Because of the hazard, there are other products now on the market that can be used for the same functions that do not have 1-BP in them.

Get 1-BP fact sheets on the [EPA website here](https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-1-bromopropane-1-bp) and on the [OSHA website here](https://www.osha.gov/dts/hazardalerts/1bromopropane_hazard_alert.html) to learn more.

**Questions?**

If your company is using 1-BP and you have questions on how it will affect your compliance reporting and tracking obligations, we can help! [Email us](mailto:feedback@isienvironmental.com?subject=1-BP%20Question) or contact us by phone.